

EUROPEAN PATENT OFFICE

Patent Abstracts of Japan

PUBLICATION NUMBER : 56090264
 PUBLICATION DATE : 22-07-81

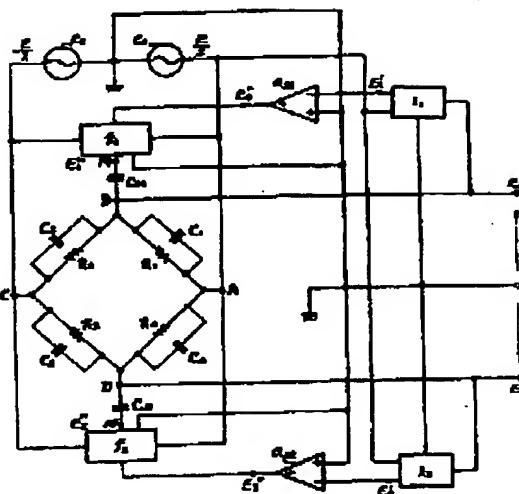
APPLICATION DATE : 24-12-79
 APPLICATION NUMBER : 54167961

APPLICANT : NIPPON DENKI SANEI KK;

INVENTOR : SAKAIRI YOZO;

INT.CL. : G01R 27/02 G01R 17/10

TITLE : MEASURING DEVICE OF BRIDGE



ABSTRACT : PURPOSE: Tounnecessary initial adjustment of balance by detecting the Imaginary-number component signal of each voltage generated between each measuring end of the bridge and reference potential and by making the signal fed back negatively to the measuring end to eliminate the influence of unbalanced capacity.

CONSTITUTION: The resistance bridge is formed by resistances R₁-R₄ and capacities C₁-C₄ exist in parallel to these resistance. In a net of four terminals composed of points A, B, C and M, the imaginary-number component of the voltage E₁ at the point B is detected by an imaginary-number part detector I₁, the output voltage E_{1'} thereof is amplified by an error amplifier a₂₁, further by the output voltage E_{1''} of the amplifier is controlled the output voltage E_{1'''} of an amplitude controller f₁ and the voltage E_{1'''} is fed back to one end B of the bridge through the intermediary of a capacity C_M. By providing a negative feedback loop in such a constitution, the existence of the capacity is eliminated even when the unbalanced capacity exists at each side of the bridge in parallel with the resistance, whereby the initial adjustment of balance can beunnecessitated.

COPYRIGHT: (C)1981,JPO&Japio